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Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
	09/740,076	THORNTON ET AL.				
Office Action Summary	Examiner	Art Unit				
	Anh T Nguyen	2174 .				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the o	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tir y within the statutory minimum of thirty (30) day vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed  /s will be considered timely. I the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 4/1/0	4.					
<u> </u>	action is non-final.					
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ☐ Claim(s) 1-30 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-30 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the	- '	` '				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119	ammor. Note the attached emoc	7.00.011.01.117.1.0.102.				
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati ity documents have been receive u (PCT Rule 17.2(a)).	ion No ed in this National Stage				
Attachment(s)  1)  Notice of References Cited (PTO-892)	A) Thionian Cum	(PTO 412)				
Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:					

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#### **DETAILED ACTION**

## Response to Amendment

1. This final action is responsive to paper number 7, Amendment A, filed 4/01/04.

Claims 1-30 are pending in this application. Claims 1, 9, 13, 17, and 24 are independent.

Claim 24 was amended.

The rejections of claims 1-16 and 24-30 under 35 U.S.C. 101 as being directed to non-statutory subject matter is withdrawn.

This action is Final.

## Claim Rejections - 35 USC § 102

- 2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
  - (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Hirabayashi, (USPN 6,549,936).

#### **Regarding Claim 1:**

Hirabayashi discloses,

a client communications part which receives a batch job from a client(Hirabayashi, col.6, lines 28-30, "The server gateway carries out the following processing: Receiving a variety types of requests (demand) from the respective clients");

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an extracting part which extracts a task from the batch job(Hirabayashi, col.2, lines 48-49, "a step of extracting, by the second computer, the content of the plurality of scripts in the request data stream"); and,

an assigning part which receives a first signal from at least one of the plurality of service providers, and in response to the first signal delegates the task to one of the plurality of service providers for performing the task(Hirabayashi, col.6, lines 53-56, "The server gateway 203 receives the request block 202 transferred from the respective clients and analyzes the request, then judging to which server the request should be transferred").

#### Regarding Claim 2:

Hirabayashi discloses wherein the plurality of service providers are operating on a plurality of machines (Hirabayashi, see FIG.1, col.6, lines 11-14, "Platforms (for example, UNIX, a mainframe, or Windows NT (i.e., brand name of Microsoft Corporation)) that are independent of each other can be used as the respective servers and the respective clients").

#### **Regarding Claim 3:**

Hirabayashi discloses wherein the first signal informs the assigning part of the service providers ability to execute a task (Hirabayashi, col.6, lines 53-55, "The server gateway 203 receives the request block 202 transferred from the respective clients and analyzes the request, then judging to which server the request should be transferred").

# **Regarding Claim 4:**

Hirabayashi discloses at least one contact part which receives a second signal from the service providers, which updates the status of the task being performed by the service

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provider (Hirabayashi, see FIG.9, element 913, col.11, lines 48-51 "the state display unit 913 issues, to the request analyzing unit 921 in the server 920, a request for the job-information acquisition (GET) for inquiring in what state the registered job lies at present").

#### Regarding Claim 5:

Hirabayashi discloses wherein the first signal specifies a minimum frequency at which the second signal will be sent to the contact part (Hirabayashi, col.3, lines 13-14, "the executing instruction being included in the request data stream").

## Regarding Claim 6:

Hirabayashi discloses wherein the second signal informs the contact part of completion of the task (Hirabayashi, col.3, lines 25-27, "a result of the second computer's executing the job, and a step of receiving, by the first computer, the plurality of result files").

#### **Regarding Claim 7:**

Hirabayashi discloses being in communication with a job database which stores the batch job upon receipt from the client (Hirabayashi, see FIG.9, element 923, col.10, line 45, "registers a job into the job queue 923"); and the job database being regularly updated as jobs are executed by batch job execution system (Hirabayashi, see FIG.9, element 922, "job queue managing unit", col.10, lines 46-48, "an executing instruction for the command is registered into the job queue 923").

# **Regarding Claim 8:**

Hirabayashi discloses a retrieving part which retrieves the batch job from the job database when the batch job is to be executed (Hirabayashi, col.11, lines 2-4, "regard the

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executing instruction as being fetched from the request data stream and registered in the job queue").

#### Regarding Claim 9:

Hirabayashi discloses,

a job management apparatus in communication with the clients which receives a batch job from a client(Hirabayashi, col.6, lines 28-30, "The server gateway carries out the following processing: Receiving a variety types of requests (demand) from the respective clients"), extracts a task from the batch job(Hirabayashi, col.2, lines 48-49, "a step of extracting, by the second computer, the content of the plurality of scripts in the request data stream"), and assigns the task(Hirabayashi, col.6, lines 53-56, "The server gateway 203 receives the request block 202 transferred from the respective clients and analyzes the request, then judging to which server the request should be transferred");

a job database in communication with the job management apparatus which stores the batch job(Hirabayashi, see FIG.9, element 923, col.10, line 45, "registers a job into the job queue 923");

a plurality of service providers in communication with the job management apparatus which receive the assigned task, perform the task, and return a result to the job management apparatus(Hirabayashi, see FIG.1, col.6, lines 11-14, "Platforms (for example, UNIX, a mainframe, or Windows NT (i.e., brand name of Microsoft Corporation)) that are independent of each other can be used as the respective servers and the respective clients"); and,

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at least one provider manager in communication with the job management apparatus and in communication with the plurality of service providers which monitors the tasks being performed on the service providers and provides status information to the job management apparatus.

(Hirabayashi, see FIG.9, element 920, "server").

## **Regarding Claim 10:**

Hirabayashi discloses wherein the provider manager in response to a request from the job management apparatus assigns additional service providers to receive tasks from the job management apparatus (Hirabayashi, col.6, lines 53-56, "The server gateway 203 receives the request block 202 transferred from the respective clients and analyzes the request, then judging to which server the request should be transferred").

#### Regarding Claim 11:

Hirabayashi discloses wherein if the service provider fails to complete the task within a predetermined time, the provider manager communicates with the service provider, and informs the job management apparatus of the task status in response to the communication with the service provider (Hirabayashi, see FIG.9, element 913, col.11, lines 48-51 "the state display unit 913 issues, to the request analyzing unit 921 in the server 920, a request for the job-information acquisition (GET) for inquiring in what state the registered job lies at present").

## **Regarding Claim 12:**

Hirabayashi discloses wherein the provider manager informs the service provider performing the task to terminate performance of the task in response to a signal received

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from said job management apparatus (Hirabayashi, see FIG.4, col.8, lines 13-16, "After these processings, the server 401 executes a close, thus terminating the communication sequence").

## **Regarding Claim 13:**

Hirabayashi discloses,

a first service provider configured to send a first signal for requesting work(Hirabayashi, see FIG.1);

a second service provider configured to send a second signal for requesting work(Hirabayashi, see FIG.1); and,

a job management apparatus including an assigning part and a contact part in communication with the first and second service providers, the assigning part configured to delegate one of the tasks to one of the first and second service providers responsive to receiving the first and second signals from the service providers (Hirabayashi, see FIG.9, element 921, element 912).

#### **Regarding Claim 14:**

Hirabayashi discloses a provider manager associated with the first service provider, the provider manager in communication with the job management apparatus and configured to send control signals between the first service provider and the job management apparatus (Hirabayashi, see FIG.9, element 920, element 910).

## **Regarding Claim 15:**

Hirabayashi discloses wherein the provider manager is further associated with the second service provider and configured to send control signals between the second

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service provider and the job management apparatus (Hirabayashi, see FIG.9, element 920, element 910).

## **Regarding Claim 16:**

Hirabayashi discloses wherein the first and second service providers are in communication with the job management apparatus via a data network (Hirabayashi, see FIG.1, element 120).

#### **Regarding Claim 17:**

Hirabayashi discloses,

submitting a batch job with processing parameters to a job management apparatus(Hirabayashi, col.3, lines 16-18, "request data stream should be a text data-formatted stream and, utilizing predetermined tags, describe various types of parameter information");

storing the batch job in a job database(Hirabayashi, col.3, lines 9-10, "storing the content of the plurality of scripts as a script file for each script");

receiving a first signal from at least one of a plurality of service providers which informs the job management apparatus of the service providers ability to perform a task(Hirabayashi, col.6, lines 53-56, "The server gateway 203 receives the request block 202 transferred from the respective clients and analyzes the request, then judging to which server the request should be transferred");

determining whether the batch job execution system is able to process the batch job(Hirabayashi, col.6, lines 53-56, "The server gateway 203 receives the request block 202 transferred from the respective clients and analyzes the request, then judging to which server the request should be transferred");

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extracting at least one task from the batch job(Hirabayashi, col.2, lines 48-49, "a step of extracting, by the second

computer, the content of the plurality of scripts in the request data stream");

delegating the task to the service providers in response to the first signal(Hirabayashi, col.6, lines 53-56, "The server gateway 203 receives the request block 202 transferred from the respective clients and analyzes the request, then judging to which server the request should be transferred");

performing the task delegated to the service provider(Hirabayashi, col.2, lines 51-52, "a step of executing, by the second computer");

completing the task; and, returning a result from the service provider to the job management apparatus (Hirabayashi, col.3, lines 25-27, "a result of the second computer's executing the job, the plurality of result files").

## **Regarding Claim 18:**

Hirababyashi discloses retrieving the batch job from the batch job database prior to the step of extracting at least one task (Hirabayashi, see FIG.11, step 1101, col.11, lines 7-8, "at a step 1101, the execution managing unit 924 fetches, from the job queue 923, a job to be executed next").

#### **Regarding Claim 19:**

Hirabayashi discloses wherein the step of delegating further comprises delegating a plurality of tasks to the plurality of service providers to be performed in parallel (Hirabayashi, see FIG.1, col.6, lines 53-56, "The server gateway 203 receives the request block 202 transferred from the respective clients and analyzes the request, then judging to which server the request should be transferred").

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# Regarding Claim 20:

Hirabayashi discloses wherein the step of performing, further includes receiving a second signal from the service provider performing the task which updates the status of the task being performed provider (Hirabayashi, see FIG.9, element 913, col.11, lines 48-51 "the state display unit 913 issues, to the request analyzing unit 921 in the server 920, a request for the job-information acquisition (GET) for inquiring in what state the registered job lies at present").

## Regarding Claim 21:

Hirabayashi discloses wherein the step of determining further includes assigning additional service providers to perform tasks for the job management apparatus if it is determined that the batch job execution system is unable to process the job (Hirabayashi, col.6, lines 53-56, "The server gateway 203 receives the request block 202 transferred from the respective clients and analyzes the request, then judging to which server the request should be transferred").

#### Regarding Claim 22:

Hirabayashi discloses,

communicating with the service provider performing the task after a predetermined time(Hirabayashi, see FIG.4, communication sequence);

informing the job management apparatus of the tasks status; and, the job management apparatus determining whether to re-assign the task or wait for task completion in response to the step of updating the task status (Hirabayashi, col.6, lines 24-25, "display the state of the queue by inquiring of the server about the state").

# Regarding Claim 23:

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Hirabayashi discloses terminating the step of performing the task in response to receiving a signal from the job management apparatus, prior to the step of completing the task (Hirabayashi, see FIG.2, col.6, lines 25-26, "can cancel the job registered in the queue").

# **Regarding Claim 24:**

Hirabayashi discloses,

a client communications software component which receives a batch job from a client(Hirabayashi, col.5, lines 65-66, "a program-executing instruction written in a predetermined job control language") (Hirabayashi, col.6, lines 28-30, "The server gateway carries out the following processing: Receiving a variety types of requests (demand) from the respective clients");

an extracting software component which extracts a task from the batch job(Hirabayashi, col.5, lines 65-66, "a program-executing instruction written in a predetermined job control language") (Hirabayashi, col.2, lines 48-49, "a step of extracting, by the second

computer, the content of the plurality of scripts in the request data stream"); and,

an assigning software component which receives a first signal from at least one of a plurality of service providers, and in response to the first signal delegates a task to one of the plurality of service providers for performing the task (Hirabayashi, col.5, lines 65-66, "a program-executing instruction written in a predetermined job control language") (Hirabayashi, col.6, lines 53-56, "The server gateway 203 receives the request block 202 transferred from the respective clients and analyzes the request, then judging to which server the request should be transferred").

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# **Regarding Claim 25:**

Hirabayashi discloses wherein the assigning software component monitors which service providers are able to perform a task (Hirabayashi, col.6, lines 55-56, "analyzes the request, then judging to which server the request should be transferred").

## **Regarding Claim 26:**

Hirabayashi discloses a contact software component which receives a second signal from the plurality of service providers which informs the contact software component of the status of the task being performed (Hirabayashi, see FIG.12, step 1202(returning present execution state), col.6, lines 24-25, "display the state of the queue by inquiring of the server about the state").

## Regarding Claim 27:

Hirabayashi discloses wherein the first signal specifies a minimum frequency at which the second signal will be sent to the contact

software component (Hirabayashi, col.3, lines 13-14, "the executing instruction being included in the request data stream").

#### **Regarding Claim 28:**

Hirabayashi discloses a job database software component which stores the batch job upon receipt from the client, wherein the client communications software component is in communication with

the job database software component (Hirabayashi, see FIG.9, element 923, col.10, line 45, "registers a job into the job queue 923").

## Regarding Claim 29:

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Hirabayashi discloses a retrieving software component which retrieves the batch job from the job database software component when the batch job is to be executed (Hirabayashi, col.11, lines 2-4, "regard the executing instruction as being fetched from the request data stream and registered in the job queue").

# Regarding Claim 30:

Hirabayashi discloses at least one provider manager software component in communication with the plurality of service providers which monitors the tasks being performed on the service providers (Hirabayashi, see FIG.9, element 920, "server") and provides status information to the job management software component (Hirabayashi, see FIG.12, step 1202(returning present execution state), col.6, lines 24-25, "display the state of the queue by inquiring of the server about the state").

# Response to Arguments

4. Applicant's arguments filed 4/01/04 have been fully considered but they are not persuasive.

Applicants argued the following:

- (a) the applied prior art reference, Hirabayashi does not delegate a task in response to a first signal received from at least one of the plurality of service providers;
- (b) the applied prior art reference, Hirabayashi does not monitor tasks being performed on a plurality of service providers, and does not provide status information to a job management apparatus;

The Examiner disagrees for the following reasons:

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Per (a), Hirabayashi discloses in FIG. 2 and col.6, lines 53-65 that the server gateway 203 transfers (i.e., delegates) the request to the corresponding server 204 (i.e., service provider). Although Hirabayashi does not specifically disclose the first signal (i.e., an acknowledgment signal), a first signal must exist in order to provide an acknowledgement from the server 204 to the gateway server 203 to proceed with the transfer.

Per (b), Hirabayashi discloses in Fig. 12, col. 11, line 59 - col. 12, line that the step of monitoring is done by referring to the job queue to determine whether or not a job exists, is awaiting execution, or is in the course of execution. Furthermore, in col.6, lines 23-26, Hirabayashi discloses inquiring the server about the state of the job requests in the queue and in col.11, lines 24-58, Hirabayashi clearly indicates that the status information is provided to a job management apparatus (execution managing unit 924) because the request for inquiring in what state the job lies is made to server 920.

#### Conclusion

THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the Art Unit: 2174

advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Nguyen whose telephone number is **(703) 305-8649**. The examiner can normally be reached on Monday - Friday from 7:00 am to 4:00 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid, can be reached on (703) 308-0640.

The fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Anh T Nguyen Examiner Art Unit 2174

KRISTINE KINCAID
SUPERVISORY PATENT EXAMINER

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